Preface

An organism generally consists of many different kinds of tissues. A tissue has evolved into a complex and delicate structure to maintain biological and biomechanical compatibilities with the surrounding tissues. If the organism loses its self-regenerative function for damaged tissues or organs, artificial biomaterials are inevitably used to reconstruct them. In order to keep such biomaterials safely and actively interior of the organism for a required period, biological and biomechanical compatibilities need to be retained at the interfaces between the biomaterials and the surrounding tissues. It is therefore important to develop technologies for surface modification to produce bioactive interfaces and biomaterials with surface characteristics biologically and biomechanically compatible to cells and tissues.

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Guest Editor

Mitsugu TODO, PhD, Associate Professor
Research Institute for Applied Mechanics
Kyushu University

Associate Guest Editor

Keiichi SASAKI, PhD, Professor
Faculty of Dental Science
Tohoku University

Associate Guest Editor

Takashi GOTO, PhD, Professor
Institute for Materials Research
Tohoku University